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SNOWPLOW
REQUIRED & RECOMMENDED EQUIPMENT
F-150

2019
MODEL YEAR

MINIMUM REQUIRED EQUIPMENT – SNOW PLOW PREP PACKAGE (68P)

NOTE: The engine Outside Air Temperature (OAT) sensor is subject to error unless relocated to unblocked airflow.

- 4x4 only
- Requires 5.0L V8 engine (995)
- XL trim (only) – requires Rear-window, Fixed Privacy Glass with Defroster (924/57Q)
- XLT 300A Base – requires Rear-window Defroster (57Q)
- Lariat trim (only) – Electronic Shift-On-The-Fly (ESOF) replaces standard 2-speed automatic 4WD
- Lariat Technology Package (68T) not available with Snowplow Prep Package (68P)
- Available on Regular Cab, SuperCab and SuperCrew models (5.5', 6.5' and 8.0' boxes)
- Available with XL, XLT and Lariat Trim
- Both regular and heavy duty payload packages
- "Snow Plow" mode button on instrument panel will disable (load shed) the following features to maintain required electrical charge margins during plow operation / use: 110V inverter, fog lamps, heated steering wheel, heated front/rear seats, and massaging seats. Snow Plow mode button also activates relay to snow plow controls.

WARRANTY

NOTE: The F-150 snowplow installation is intended for ***residential / personal use only***.

The Ford New Vehicle Limited Warranty applies to vehicles with snowplows installed in accordance with these guidelines. Consult your Ford dealer or the *Owner Guide* for any further questions.

COMPLETED VEHICLE WEIGHT

Recommended plow assembly and aft-of-rear axle ballast weight limits are shown in the attached chart. These snowplow weight limits are based upon a vehicle built with noted trim levels with no additional Ford option content, a total of 300 lb. for a driver plus one front seat passenger (150 lbs. each), ballast weight rearward of the rear axle, and additional assumptions for commercially available snowplow assembly weights and mounting location.

The vehicle must not be operated when over-loaded. A vehicle is over-loaded when the weight of the completed vehicle with aftermarket equipment installed, plus driver, passengers, and cargo, exceeds either the FGAWR, RGAWR, or GVWR established by Ford Motor Company and displayed on the Safety Compliance Certification Label.

The addition of ballast weight placed rearward of the rear axle is required to prevent exceeding FGAWR, and to provide good vehicle braking and handling. The ballast should be attached securely to the vehicle with consideration for the normal driving dynamics of snowplowing, and occupant safety in accidents.

TOTAL ACCESSORY RESERVE CAPACITY

For Ford completed vehicles of 10,000 GVWR or less, the weight of permanently attached aftermarket equipment must not exceed the Total Accessory Reserve Capacity (T.A.R.C.) displayed on the Safety Compliance Certification Label to maintain the compliance representation that came with the Ford-built vehicle. Exceeding T.A.R.C. will require re-certification. This applies only to the permanently attached equipment, such as the snowplow frame mounting hardware, and not to the removable portion of the snowplow blade assembly.

Weight Table shown on next page

FRONT END WHEEL ALIGNMENT AND HEADLIGHT AIM

Front end wheel alignment (toe) and headlight aim may require readjustment after installation of snowplow equipment. Failure to reset front wheel alignment may cause premature uneven tire wear. If required, reset to chassis manufacturer's specifications found in the *Ford Shop Manual*.

ELECTRICAL CONNECTIONS

Installation of any inductive load devices such as electric motors, or electric clutches for clutch pumps, must not be connected to Ford vehicle wiring or fuse panels. Power for such devices should be taken directly from the battery or starter motor relay power terminal. Control of these devices should be achieved via relays. No direct current path should exist between Ford vehicle wiring and the installed load that is not filtered by the battery. These recommendations are intended to eliminate or minimize any induced reverse voltage into the Ford circuitry. Refer to SVE Bulletin Q-277 "Under Hood Electrical Equipment Mounting" for clearance guidance applicable to the F-150 and Super Duty series vehicles.

WARNING:

Starting in 2015MY, the F-150 battery charge state is determined with a Hall Effect sensor on the negative battery lead. All negative current must pass through this sensor – failure to do so will result in malfunction of the vehicle charging system and shortened battery life. **Do not make direct to battery connections at the negative battery post.** See SVE Bulletin Q-231 "F-150 Aftermarket Direct to Battery Connections" for additional guidance.

Vehicles equipped with the Snowplow Prep option will include a Snowplow Mode switch located on the dash panel. Activating the Snowplow Mode will provide 10 Amp B+ power to a dedicated feed for the snowplow controller – it is a blunt cut Yellow/ Orange wire and is found taped to the headlamp switch harness behind the left side of the driver's side dash panel. When activated, the vehicle will enter a special load shedding strategy to ensure continuous operation of the snowplow during periods of high electrical demand.

It is recommended that added snowplow dedicated LH and RH headlamps not be combined, i.e., powering both headlamps from a single circuit. The OEM chassis LH and RH headlamps are individually powered via separate circuits out of the Body Control Module (BCM). The snowplow dedicated headlamps must not be directly powered by these circuits, rather, they should only use the individual BCM headlamp output circuits as signals to separate snowplow headlamp relays incorporated within the snowplow circuitry. Wired in this manner, a single BCM headlamp circuit failure would allow the remaining snowplow headlamp to function in a normal manner.

(Cont'd next page)

SNOWPLOW
REQUIRED & RECOMMENDED EQUIPMENT
F-150 (Cont'd)

F150 Snow Plow Weight Analysis / Summary (Standard Front Springs / Maximum Ballast)

	Vehicle Description	Engine	WB (in)	GVWR (lbs)	Front GAWR (lbs)	Rear GAWR (lbs)	Trim	Trim Level	Base Curb Weight (lb) Front	Base Curb Weight (lb) Total	Mounting Hardware Weight (lb)	Plow Blade Capability @ F/GAWR (lb) Total	Ballast (lb) Total
Standard Payload	4x4 Regular Cab	5.0L	122.4	6400	3000	3800	XL	lightest	2727	4517	70	**224**	1200
				6400	3150	3800		heaviest	2824	4877	70	**211**	900
				6400	3000	3800	XLT	lightest	2737	4523	70	**217**	1200
				6400	3150	3800		heaviest	2828	4884	70	**208**	900
	4x4 Regular Cab	5.0L	141.1	6950	3225	3800	XL	lightest	2845	4613	70	**270**	1200
				6950	3375	3800		heaviest	2962	5041	70	**293**	1200
				6950	3225	3800	XLT	lightest	2855	4619	70	**263**	1200
				6950	3375	3800		heaviest	2966	5048	70	**290**	1200
	4x4 Super Cab	5.0L	145.0	7050	3375	3800	XL	lightest	2912	4798	70	**324**	1200
				7050	3525	3800		heaviest	3045	5247	70	**314**	1050
				7050	3375	3800	XLT	lightest	2901	4772	70	**332**	1200
				7050	3600	3800		heaviest	3115	5393	70	**295**	900
				7050	3450	3800	Lariat	lightest	2967	4897	70	**338**	1200
				7050	3600	3800		heaviest	3141	5435	70	**285**	950
	4x4 Super Cab	5.0L	163.7	7000	3525	3800	XL	lightest	2913	4929	70	**402**	1100
				7000	3750	3800		heaviest	3044	5382	70	**423**	750
				7000	3525	3800	XLT	lightest	2902	4903	70	**423**	1200
				7000	3750	3800		heaviest	3114	5528	70	**358**	650
				7000	3600	3800	Lariat	lightest	2968	5028	70	**417**	1200
				7000	3750	3800		heaviest	3140	5570	70	**339**	650
	4x4 Crew Cab	5.0L	145.0	7000	3375	3800	XL	lightest	2918	4867	70	**320**	1200
				7000	3525	3800		heaviest	3053	5316	70	**294**	950
				7000	3375	3800	XLT	lightest	2907	4843	70	**327**	1200
				7000	3600	3800		heaviest	3132	5477	70	**269**	800
				7000	3450	3800	Lariat	lightest	2974	4971	70	**333**	1200
				7000	3600	3800		heaviest	3169	5542	70	**235**	750
	4x4 Crew Cab	5.0L	156.8	7050	3450	3800	XL	lightest	2983	4912	70	**315**	1200
				7050	3600	3800		heaviest	3120	5372	70	**275**	850
				7050	3450	3800	XLT	lightest	2972	4888	70	**323**	1200
				7050	3750	3800		heaviest	3199	5533	70	**312**	750
				7050	3525	3800	Lariat	lightest	3039	5016	70	**328**	1200
				7050	3750	3800		heaviest	3236	5598	70	**285**	750
Heavy Payload Package (HPP)	4x4 Regular Cab HPP	5.0L	141.1	7850	3400	4800	XL	lightest	2908	4760	70	**349**	1200
				7850	3400	4800		heaviest	2974	5029	70	**302**	1200
				7850	3400	4800	XLT	lightest	2928	4804	70	**335**	1200
				7850	3400	4800		heaviest	2990	5074	70	**291**	1200
	4x4 Super Cab HPP	5.0L	163.7	7850	3750	4800	XL	lightest	3005	5066	70	**513**	1200
				7850	3750	4800		heaviest	3085	5360	70	**454**	1200
				7850	3750	4800	XLT	lightest	3004	5077	70	**514**	1200
				7850	3750	4800		heaviest	3141	5480	70	**413**	1200
				7850	3750	4800	Lariat	lightest	3064	5181	70	**470**	1200
				7850	3750	4800		heaviest	3170	5564	70	**391**	1200
	4x4 Crew Cab HPP	5.0L	156.8	7850	3750	4800	XL	lightest	3104	5151	70	**445**	1200
				7850	3750	4800		heaviest	3190	5452	70	**382**	1200
				7850	3750	4800	XLT	lightest	3103	5164	70	**446**	1200
				7850	3750	4800		heaviest	3257	5591	70	**334**	1200
				7850	3750	4550	Lariat	lightest	3164	5271	70	**401**	1200
				7850	3750	4550		heaviest	3295	5694	70	**306**	1200

SNOWPLOW
REQUIRED & RECOMMENDED EQUIPMENT
SUPER DUTY F-250/350/450/550

The Super Duty F-Series vehicles tabled below are available for snowplow usage.

Minimum Required Equipment

- 4x4 (all pickups, F-350 chassis cab)
- Snowplow Prep Package (473) which includes:
  - Front spring / GAWR upgrade (refer to the Weight Ratings charts for specific spring / GAWR selection for each model).
  - 6.2L Gasoline: Extra HD 200 amp alternator. Optional 240 amp Extra Extra HD alternator.
  - 6.7L Diesel Pickup: Extra HD 220 amp alternator. Optional 332 amp dual alternators.
  - 6.7L Diesel Chassis Cab: 332 amp dual HD alternators. Optional 377 amp dual Extra HD alternators.

Plow and attaching hardware weight limits as tabled below.

Recommended Equipment

- All-terrain tires and roof clearance lights (optional with SRW Pickup models, required with F-350 DRW and F-450).

Standard Equipment

- Front and rear stabilizer bar (rear standard on Chassis Cab and DRW pickup models)
- Roof clearance lights (standard on Chassis Cab and required on Pickup models)
- Steering damper
- Engine oil cooler, auxiliary automatic transmission oil cooler and maximum capacity engine coolant radiator are standard
- All available axle ratios are acceptable
- When snowplowing, operate automatic transmission with shift lever in Overdrive position.

Completed Vehicle Weight

Snowplow weights (maximum recommended): Refer to the tables below

The vehicle must not be operated when over-loaded. A vehicle is over-loaded when the weight of the completed vehicle with aftermarket equipment installed, plus driver, passengers and cargo, exceeds either the FGAWR, RGAWR or GVWR displayed on the Safety Compliance Certification Label.

The addition of ballast weight placed rearward of the rear axle may be required to prevent exceeding the FGAWR, and provide good vehicle braking and handling. The ballast should be attached securely to the vehicle with consideration for the normal driving dynamics of snowplowing and occupant safety in accidents.

For Ford completed vehicles of 10,000 lb. GVWR or less, the weight of permanently attached aftermarket equipment must not exceed the Total Accessory Reserve Capacity (TARC) displayed on the Safety Compliance Certification Label to maintain the compliance representation that came with the Ford built vehicle. Exceeding TARC may require re-certification. This applies only to the permanently attached equipment, such as the snowplow frame mounting hardware, and not to the removable portion of the snowplow blade assembly.

Front End Wheel Alignment and Headlight Aim

Front end wheel alignment (toe) and headlight aim may require readjustment after installation of snowplow equipment. Failure to reset front wheel alignment may cause premature uneven tire wear. If required, reset to chassis manufacturer's specifications found in the *Ford Shop Manual*.

Electrical Connections

Installation of any inductive load devices, such as electric motors or electric clutches for clutch pumps, must not be connected to Ford vehicle wiring or fuse panels. Power for such devices should be taken directly from the battery or starter motor relay power terminal. Control of these devices should be achieved via relays. No direct current path should exist between Ford vehicle wiring and the installed load that is not filtered by the battery. These recommendations are intended to eliminate or minimize any induced reverse voltage into the Ford circuitry. Refer to SVE Bulletin Q-277 "Under Hood Electrical Equipment Mounting" for clearance guidance.

Warranty

The Ford New Vehicle Limited Warranty applies to vehicles with snowplows installed in accordance with these guidelines. Consult your Ford dealer or the *Owner's Guide* for any further questions.

Pickup (1) Driver and One Passenger			Front / Rear Axle Weight Limits (2)(4)(5)				
			F250 SRW 4x4 (3)	F350 SRW 4x4 (3)	F350 DRW 4x4	F350 DRW 4x4 (Box Delete)	F450 DRW 4x4
Regular Cab	141.6" WB 56" CA	6.2L Gasoline	100/1005	100/1005	100/1005	-	-
		6.7L Diesel	100/1005	100/1005	100/1005	100/1005	100/800
Super Cab	148.0" WB 40" CA	6.2L Gasoline	100/1005	100/1005	-	-	-
		6.7L Diesel	100/950	100/900	-	-	-
	164.2" WB 56" CA	6.2L Gasoline	100/1005	100/1005	100/1005	-	-
		6.7L Diesel	100/800	100/800	100/800	100/800	-
Crew Cab	159.8" WB 40" CA	6.2L Gasoline	100/1005	100/1005	-	-	-
		6.7L Diesel	100/850	100/850	-	-	-
	176.0" WB 56" CA	6.2L Gasoline	100/1005	100/1005	100/1005	-	-
		6.7L Diesel	100/700	100/700	100/650	100/650	100/550

(1) Includes Pickups ordered with Pickup Box Delete option.
(2) 100/750 = maximum 100 lb. of permanently-attached hardware and maximum 750 lb. of removable plow blade and hardware. The plow and hardware weight limits shown are based upon a vehicle with 33% Ford Option content and a total of 300 lb. for the driver and one front seat passenger (150 lb. Each).
(3) Considering 10,000 lb. GVWR and A/T tires.
(4) Considering maximum GVWR offered (variable) and A/T tires.
(5) This chart only shows the Maximum Recommended values.

Chassis Cab Driver and One Passenger			Front / Rear Axle Weight Limits (2)(4)(5)							
			F350 SRW 4x4 18" (3)	F350 DRW 4x4 14,000 LB GVWR	F450 DRW 4x2 16,500 LB GVWR	F450 DRW 4x4 16,500 LB GVWR	F550 DRW 4x2 18,000 LB GVWR	F550 DRW 4x4 18,000 LB GVWR	F550 DRW 4x2 19,000/ 19,500 LB GVWR	F550 DRW 4x4 19,000/ 19,500 LB GVWR
Regular Cab	145.3" WB 60" CA	6.2L Gasoline	100 / 1005	100 / 1005	-	-	-	-	-	-
		6.8L V10 Gasoline	-	-	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350
		6.7L Diesel	100 / 950	100 / 950	100 / 1350	100 / 1250	100 / 1350	100 / 1200	100 / 1350	100 / 1250
	169.3" WB 84" CA	6.2L Gasoline	-	100 / 1005	-	-	-	-	-	-
		6.8L V10 Gasoline	-	-	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350
		6.7L Diesel	-	100 / 900	100 / 1350	100 / 1250	100 / 1350	100 / 1200	100 / 1350	100 / 1200
	193.3" WB 108" CA	6.2L Gasoline	-	-	-	-	-	-	-	-
		6.8L V10 Gasoline	-	-	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350
		6.7L Diesel	-	-	100 / 1350	100 / 1200	100 / 1350	100 / 1150	100 / 1350	100 / 1150
	205.3" WB 120" CA	6.2L Gasoline	-	-	-	-	-	-	-	-
		6.8L V10 Gasoline	-	-	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350
		6.7L Diesel	-	-	100 / 1350	100 / 1150	100 / 1350	100 / 1100	100 / 1350	100 / 1150
Super Cab	167.9" WB 60" CA	6.2L Gasoline	100 / 1005	100 / 1005	-	-	-	-	-	-
		6.8L V10 Gasoline	-	-	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350
		6.7L Diesel	100 / 850	100 / 800	100 / 1350	100 / 1250	100 / 1350	100 / 1200	100 / 1350	100 / 1200
	191.9" WB 84" CA	6.2L Gasoline	-	-	-	-	-	-	-	-
		6.8L V10 Gasoline	-	-	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350
		6.7L Diesel	-	-	100 / 1350	100 / 1150	100 / 1350	100 / 1100	100 / 1350	100 / 1100
Crew Cab	179.8" WB 60" CA	6.2L Gasoline	100 / 1005	100 / 1005	-	-	-	-	-	-
		6.8L V10 Gasoline	-	-	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350
		6.7L Diesel	100 / 800	100 / 750	100 / 1350	100 / 1150	100 / 1350	100 / 1150	100 / 1350	100 / 1100
	203.8" WB 84" CA	6.2L Gasoline	-	-	-	-	-	-	-	-
		6.8L V10 Gasoline	-	-	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350	100 / 1350
		6.7L Diesel	-	-	100 / 1350	100 / 1100	100 / 1300	100 / 1050	100 / 1300	100 / 1050

Model Not Available